

?

4 Ab represents said antibody;

5 L is a chemical bond or linking group; and
6 T is said targeting moiety.

1 19. The mutant antibody according to claim 17, wherein said targeting moiety is
2 an antibody that binds specifically to a cell surface antigen.

1 20. The mutant antibody according to claim 1, further comprising said metal
2 chelate bound to said complementarity-determining region, wherein said chelate comprises a
3 reactive functional group of complementary reactivity to said reactive site of said antibody.

1 21. (Once amended) The mutant antibody according to claim 20, further
2 comprising a covalent bond formed by reaction of said reactive site of said antibody and said
3 reactive functional group of said chelate.

1 22. The mutant antibody according to claim 20, wherein said reactive site of said
2 chelate is an acrylamido moiety.

1 23. The mutant antibody according to claim 1, wherein said metal chelate is a
2 polyaminocarboxylate chelate of a metal ion selected from the group consisting of transition metal
3 ions and lanthanide ions.

1 24. A pharmaceutical composition comprising the mutant antibody according to
2 claim 17, and a pharmaceutically acceptable carrier.

1 25. (Twice amended) A mutant antibody comprising a cysteine residue not
2 present in the wild-type of said antibody and a complementarity-determining region that recognizes
3 a metal chelate or portions thereof, wherein said cysteine is in a position proximate to or within said
4 complementarity-determining region.

1 30. The antibody according to claim 25, wherein said antibody is a bifunctional
2 antibody further comprising a second complementarity-determining region that specifically binds to
3 a cell-surface antigen.

1 31. The mutant antibody according to claim 25, further comprising a targeting
2 moiety covalently attached thereto.

1 34. The mutant antibody according to claim 25, further comprising said metal
2 chelate bound to said complementarity-determining region, wherein said chelate comprises a
3 reactive functional group of complementary reactivity to the –SH side-chain of said cysteine
4 residue.

1 **35.** The mutant antibody according to claim 34, further comprising a covalent
2 bond formed by reaction of the -SH side-chain of cysteine and said reactive functional group of said
3 chelate.

1 **36.** The mutant antibody according to claim 35, wherein said reactive functional
2 group of said chelate is an acrylamido moiety.

1 **37.** The mutant antibody according to claim 25, wherein said metal chelate is a
2 polyaminocarboxylate chelate of a metal ion selected from the group consisting of transition metal
3 ions and lanthanide ions.

1 **38.** A pharmaceutical composition comprising the mutant antibody according to
2 claim 31, and a pharmaceutically acceptable carrier.

1 **42.** (New) A mutant antibody comprising a reactive site not present in the wild-
2 type of said antibody and a complementarity-determining region (CDR) that specifically binds a
3 metal chelate, wherein said reactive site is in a position proximate to or within said complementarity-
4 determining region.

1 **43.** (New) A mutant antibody comprising a reactive site not present in the wild-
2 type of said antibody and a complementarity-determining region (CDR) that recognizes a metal
3 chelate comprising a reactive group or portions thereof, wherein said reactive site is in a position
4 proximate to or within said complementarity-determining region, and
5 wherein said reactive group has complementary reactivity to said reactive site of said
6 antibody.